



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/623,624

07/21/2003

Edward J. McGunn

00272P0014US

5179

32116

7590

09/03/2008

WOOD, PHILLIPS, KATZ, CLARK & MORTIMER
500 W. MADISON STREET
SUITE 3800
CHICAGO, IL 60661

EXAMINER

SHAPIRO, JEFFERY A

ART UNIT

PAPER NUMBER

3653

MAIL DATE

DELIVERY MODE

09/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/623,624	Applicant(s) MCGUNN ET AL.	
	Examiner JEFFREY A. SHAPIRO	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/12/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Transitional After Final Practice

1. In view of the Appeal Brief filed on 6/12/08, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:/Patrick H. Mackey/

Supervisory Patent Examiner, Art Unit 3653

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3653

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Valiulis et al (US 6,539,280 B1) in view of Delbrouck (US 4,269,326), further in view of Pullen (US 6,220,463 B1) and still further in view of and further in view of O'Brien et al (US 6,415,953 B1).

Regarding Claims 1, 3, 7 and 8, Valiulis discloses a shelf-like device with multiple rows having a pusher plate (54) that contacts the rear most articles (48), base rail (52), stop plate (58) that abuts the front-most articles and rails (44). Note that pusher plate (54) is biased by spring (56). See figure 3 and col. 4, line 60-col.5, line 30). Note that figure 4 illustrates multiple rows, i.e., display assemblies (102a-e) as discussed at col. 5, lines 36-48.

Regarding Claims 1, 2, 7 and 16, Valiulis does not expressly disclose, but Delbrouck discloses using a dispensing mechanism that dispenses cylindrical items in the form of drawers or shelves. See Delbrouck, col. 6, lines 5-12. Note that Merriam-Webster's Collegiate Dictionary, 10th ed., p.352, defines a "drawer" as

"a sliding box or receptacle opened by pulling out and closed by pushing in."

The same dictionary also defines a "shelf" at p. 1079 as

1a. "a thin flat usu[ally] long and narrow piece of material (as wood) fastened horizontally (as on a wall) at a distance from the floor to hold objects"

Art Unit: 3653

- 1b. “one of several similar pieces in a closet, bookcase, or similar structure”
- 1c. “the contents of a shelf”
- 2a “something resembling a shelf in form or position”

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have incorporated Valiulis' dispensing mechanism in a drawer, as taught by Delbrouck, since a drawer and shelf are functionally equivalent from the standpoint of both being able to “hold objects” on a horizontally fastened piece of material disposed at a distance from the floor. Additionally, Pullen teaches that one ordinarily skilled would have used a drawer over a shelf since a drawer provides further enclosure and coverage of the items stored therein as well as for the purpose of increasing space utilization. See Pullen, abstract, last four lines.

Regarding Claims 1, 4, 6, 9, 11, 13 and 17, Valiulis discloses a sensor (26, 34) that interacts with magnets (38) corresponding to a pusher plate (18 or 54) to determine the quantity of items (48) in a row (40) by sensing the position of the pusher plate. See figures 1-7 and col. 2, line 66-col. 3, line 15, col. 3, lines 48-60, col. 4, lines 3-60, and col. 5, lines 7-48. This sensor data is sent to a controller (106) and an inventory control center (104) having an inventory database (108) and calculates quantities of items needed to replenish a row. This implies that a total amount of items in a row is calculated. See Valiulis, col. 5, line 49-col. 6, line 64.

Although Valiulis discusses determining a “dollar value” for a total quantity of items, it would have been obvious to one of ordinary skill to equate a particular quantity of items, such as tubes or cylinders, each with its own monetary value, to a total amount of items, and thus a total value of a items in a row since this is a common concept of inventory control. Keeping inventory imposes carrying costs such as taxes and each item represents a value for which it can be sold. One ordinarily skilled in the art would recognize the necessity of tracking such costs as inherently necessary for proper accounting and management of a merchandising system used in a for-profit enterprise. Since items for sale each have a cost or price, it would have been obvious for one of ordinary skill to have calculated the total monetary amount of inventory in a row, whether it be tubes in the form of cans of food or tubes of coins.

Further regarding **Claims 12 and 18**, Valiulis discloses a display at col. 8, lines 26-31 in which a “hand held scanner” receives a readout of what quantity of products is required”. Such a readout is construed as a “display” as recited in Claims 12 and 18.

Further regarding **Claims 14-16 and 20**, Valiulis discloses that the sensor network can be used to alter an internal electrical parameter such as “impedance, capacitance, or resistance, of microcircuit (34) in a manner that tunes a receiver portion to receive a distinct predetermined frequency at each incremental position of the belt (24) with respect to the track (20).” See Valiulis at col. 3, lines 52-60.

Further regarding **Claims 12 and 18**, at the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a readout/display, as taught by Valiulis to display any particular information generated by the system for visual

communication to a user, since computer based systems such as an inventory control system routinely communicate information to users such systems by readout/display.

Regarding Claims 1, 5, 10 and 19, Valiulis discloses the system described above. Valiulis does not expressly disclose, but O'Brien discloses a withdrawing means (44) having a semi-cylindrical housing for receiving a vertical cylindrical item in the form of bottles. See figures 3 and 4 and col. 3, lines 9-52.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have placed the semi-cylindrical withdrawing means of O'Brien at the front of a column in the pusher plate system of Valiulis.

The suggestion/motivation would have been to withdraw a single cylindrical item from a column while maintaining the other items in the column. This teaching is readily apparent from figures 3 and 4 and col. 3, lines 9-52.

Response to Arguments

4. Applicant's arguments filed 6/12/08 have been fully considered but they are not persuasive. Applicants assert that the recitation of coins and tubes of coins throughout the claims are ignored by the Examiner. On the contrary, they have been considered. However, Applicants' claims are apparatus claims. Under MPEP 2115, the item worked upon by an apparatus as claimed in an apparatus claim does not limit that apparatus claim. Therefore, since the coins and tubes of coins are the items worked upon by the claimed dispenser, these items are present in the claims, but do not act to limit them.

Even if they were considered to limit them, the cited prior art of Valiulis, Delbrouck, Pullen, Mignault, and O'Brien disclose and teach Applicants' claimed apparatus, as recited in the rejection above. Valiulis discloses the shelf with pusher plates. Delbrouck and Pullen provide teaching and motivation for incorporating a drawer into Valiulis' apparatus. Pullen teaches using drawers for the purpose of increasing space utilization. Again, note that Pullen teaches that "[a] plurality of drawers are preferably positioned within a housing below the lower shelves for increasing the utilization of space within the storage unit." See again last four lines of Pullen.

Valiulis further discloses incorporating a sensor used with a pusher plate for detecting quantity of items in a dispensing row. Regardless of whether or not the pusher plate is vertical or horizontal, the sensor works no differently and still detects the position of the pusher plate, thus registering the quantity of items in a row. Although Valiulis does not discuss determining a "dollar value" for a total quantity of items, it would have been obvious to one of ordinary skill to equate a particular quantity of items, such as tubes or cylinders, each with its own monetary value, to a total amount of items, and thus a total value of a items in a row since this is a common concept of inventory control. Since items for sale each have a cost or price, it would have been obvious for one of ordinary skill to have calculated the total monetary amount of inventory in a row.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFREY A. SHAPIRO whose telephone number is (571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick H. Mackey can be reached on (571)272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffrey A. Shapiro/
Primary Examiner, Art Unit 3653

August 30, 2008